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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
C07H 21/04, C12Q 1/68, C12P 19/34, A61K 48/00, C07K 14/47, 14/705, 16/00, 16/28

A1

(11) International Publication Number: WO 96/36641

(43) International Publication Date: 21 November 1996 (21.11.96)

(21) International Application Number: PCT/US96/07218

(22) International Filing Date: 17 May 1996 (17.05.96)

(30) Priority Data:
08/446,530 19 May 1995 (19.05.95) US

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(81) Designated States: CA, JP, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
With international search report.

(54) Title: SUSCEPTIBILITY GENE FOR OBESITY AND TYPE II DIABETES MELLITUS

(57) Abstract

The present invention provides a novel polypeptide characterized by a non-conservative missence mutation, Trp64Arg, in the β-3-adrenergic receptor (β3AR) that increases susceptibility to obesity and non-insulin dependent diabetes mellitus (NIDDM; type II diabetes). Also provided are methods of diagnosis and methods of treatment of subjects having or at risk of having type II diabetes/obesity. The figure shows allele specific oligonucleotide hybridization to detect the presence of the Trp64Arg mutation.